

CLAIM AMENDMENTS

IN THE CLAIMS

This listing of the claims will replace all prior versions, and listing, of claims in the application or previous response to office action:

1. **(Currently Amended)** A computer system comprising:

a power supply;

a plurality of server modules;

a midplane comprising:

a plurality of connectors operable to receive the plurality of server modules each connector having a unique predetermined address independent of the server modules; and

an address module operable to obtain the unique addresses of the connectors from the midplane and to calculate a start-up time associated with each connector based on (a) the unique address for **[[that]]** each connector and (b) a multiplication factor associated with a duration of an inrush load of at least one of the server modules, the start-up times calculated for the plurality of connectors defining a start-up sequence for the plurality of connectors; **[[and]]**

wherein the system is operable to couple the power supply to the plurality of server modules based on the start-up times and the defined start-up sequence associated with the plurality of connectors; **and**

a management controller associated with the midplane, the management controller storing a start up sequence for the plurality of server modules and the management controller operable to provide sequence redundancy by sequencing power to the plurality of server modules during start-up if the midplane experiences a failure.

2. (Previously Presented) The system of Claim 1 wherein the plurality of server modules comprise blade servers.

3. (Previously Presented) The system of Claim 1 wherein the plurality of server modules comprise brick servers.

4. (Previously Presented) The system of Claim 1 wherein the midplane further comprises a circuit board including the plurality of connectors coupled to the midplane and two or more resistors coupled to the midplane.

5. (Previously Presented) The system of Claim 4 wherein the plurality of connectors are operable to provide an interface between the plurality of server modules and the midplane.

6. (Original) The system of Claim 4 wherein each connector is operable to interface with one server module.

7. (Original) The system of Claim 4 wherein the midplane provides a unique address to each server module through resistor strapping the one or more resistors.

8. (Previously Presented) The system of Claim 1 wherein the midplane is further operable to provide an interface between the plurality of server modules and the power supply.

9. (Original) The system of Claim 1 wherein the power supply is operable to provide power to each server module upon expiration of the start-up time for each server module.

10. **(Cancelled)**

11. (Previously Presented) The system of Claim 1 wherein the address module includes a timer, the address module further operable to set the timer with the start-up time and the timer operable to count down from the start-up time.

12. (Previously Presented) The system of Claim 1 further comprising a switch associated with each server module and the address module, each switch operable to accept a command from the address module to switch between an on position and an off position.

13. (Previously Presented) The system of Claim 12 where at the expiration of the start-up time the address module switches a selected switch to the on position allowing an associated server module to receive power from the power supply.

14. **(Currently Amended)** A method for autonomous power sequencing in a computer system, the method comprising:

receiving a plurality of server modules into a plurality of connectors on a midplane, each connector having a predetermined address independent of the server modules;

assigning a unique address to each server module based on the predetermined address of the connector receiving that server module;

obtaining the unique address for each server module from the midplane;

calculating a start-up time associated with each connector based on (a) the unique addresses for that connector and (b) an inrush load requirement of each server module;

[[and]]

automatically sequencing power to start up the server modules based on the start-up times for the plurality of connectors; **and**

storing a start-up sequence for the plurality of server modules and providing redundancy by sequencing power to the plurality of modules during start-up if the midplane experiences a failure.

15. (Previously Presented) The method of Claim 14 wherein the server modules comprise blade servers.

16. (Previously Presented) The method of Claim 14 wherein the server modules comprise brick servers.

17. (Previously Presented) The method of Claim 14 wherein calculating the start-up time comprises:

obtaining a multiplication factor for each server module; and
calculating the start-up time associated with each connector using the multiplication factor.

18. (Original) The method of Claim 14 further comprising:
setting a timer with the start-up time;
counting down on the timer until the start-up time expires; and
on the expiration of the start-up time, switching a switch to an on position that allows the server module to receive power from a power supply.

19. (Previously Presented) The method of Claim 14 wherein receiving the server modules comprises inserting each server module into a connector coupled to the midplane.

20. (Previously Presented) The method of Claim 14 wherein providing a unique address for each server module comprises strapping one or more resistors to the midplane whereby each connector has a unique predetermined address independent of the server modules.

21. (Original) The method of Claim 14 wherein automatically sequencing power to the server modules comprises providing power to the server modules one server module at a time.

22. (Original) The method of Claim 14 wherein automatically sequencing power to the server modules comprises providing power to each server module upon the expiration of the start-up time for each server module.

23. **(Currently Amended)** A computer system comprising:
a plurality of modules operable to process data;
one or more midplanes associated with the plurality of server modules, the midplanes including a plurality of connectors, each connector having a unique predetermined address independent of the server modules, each connector operable to interface with one of the server modules;
an address module associated with the midplane, the address module operable to obtain the unique address from the connectors and to calculate a start-up time associated with each connector based on (a) the unique address for the connector and (b) at least one start-up characteristic of each server module, the start-up times calculated for the plurality of connectors defining a start-up sequence for the plurality of connectors;
a power supply associated with the one or more midplanes, the power supply operable to provide power to start up the server modules in a sequence determined by the start-up times and the defined start-up sequence associated with the plurality of connectors;
a management controller associated with each midplane, the management controller storing a start-up sequence for the plurality of modules and the management controller operable to provide sequence redundancy by sequencing power to the plurality of modules during start-up if the respective midplane experiences a failure;
and
one or more chassis operable to house the server modules, the midplane, and the power supply.

24. **(Cancelled)**

25. **(Original)** The system of Claim 23 further comprising one or more cabinets housing one or more of the chassis.

26. **(Currently Amended)** A information handling system comprising:

a power supply;

a plurality of server modules;

a midplane comprising:

a plurality of connectors operable to receive the plurality of server modules, each connector having a unique predetermined address independent of the server modules; and

an address module operable to obtain the unique addresses of the connectors from the midplane and to associate the unique addresses of the connectors with a predetermined start-up time stored by the address module, the start-up times for the plurality of connectors defining a start-up sequence for the plurality of connectors; and

wherein the system is operable to couple the power supply to the plurality of server modules based on the start-up times and the defined start-up sequence associated with the plurality of connectors; **and**

a management controller associated with the midplane, the management controller storing a start-up sequence for the plurality of server modules and the management controller operable to provide sequence redundancy by sequencing power to the plurality of server modules during start-up if the midplane experiences a failure.